

Synonym

IL1RL1,DER4,FIT-1,IL33R,ST2,ST2L,ST2V,T1

Source

Human IL-1RL1, Fc Tag(IL1-H5250) is expressed from human 293 cells (HEK293). It contains AA Lys 19 - Pro 323 (Accession # NP_003847). Predicted N-terminus: Lys 19

Molecular Characterization

IL-1RL1(Lys 19 - Pro 323) Fc(Pro 100 - Lys 330)
NP_003847 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 61.0 kDa. The protein migrates as 80-100 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than $1.0\ EU$ per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

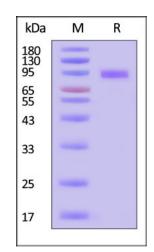
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

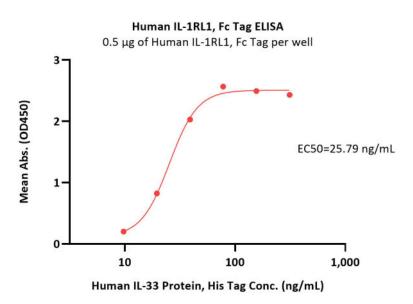


Human IL-1RL1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA

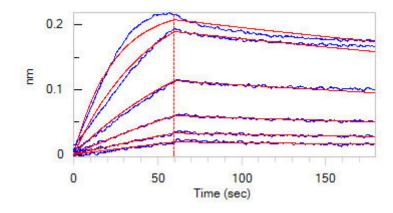






Immobilized Human IL-1RL1, Fc Tag (Cat. No. IL1-H5250) at 5 μ g/mL (100 μ L/well) can bind Human IL-33 Protein, His Tag (Cat. No. IL3-H52H7) with a linear range of 5-40 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human IL-1RL1, Fc Tag (Cat. No. IL1-H5250) on Protein A Biosensor, can bind with Biotinylated Human IL-33, His,Avitag (Cat. No. IL3-H82H5) an affinity constant of 1.81 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 1 receptor-like 1 (IL1RL1) is also known as ST2, DER4, FIT-1, IL33R, ST2L, ST2V, which belongs to the interleukin-1 receptor family. IL1RL1 contains three Ig-like C2-type (immunoglobulin-like) domains and one TIR domain. IL1RL1 is receptor for interleukin-33 (IL-33), its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8. IL1RL1 possibly involved in helper T-cell function. IL1RL1 can interact with MYD88, IRAK1, IRAK4, and TRAF6.

Clinical and Translational Updates

